

ELI LILLY and COMPANY - PROPOSED AMENDMENTS			7/15/2009	REVISION 4
ITEM	ASHRAE 90.1 SECTION # or INDIANA AMENDMENT	REGARDING	SUGGESTED AMENDMENT	REMARKS
1	2.3c	Scope	Delete 2.3c and replace with: "building systems and equipment dedicated to manufacturing, laboratory, warehousing or commercial operations or processes that require conditions not achievable by application of the provisions of this standard."	Suggest a more strict definition to avoid future debate concerning application of this code.
2	4.2.1.2	Proposed Indiana Amendment	Suggest retaining Chapter 11 and exception a for reasons stated in earlier meetings	Design Flexibility
3	5.5.3.6	Opaque Doors	Suggest "Exception a. Exterior high speed doors when used in combination with exterior opaque doors meeting this standard."	Generally used design for warehouses
4	6.4.3.1.2	Dead Band	Retain Exception b currently being considered for deletion in Indiana Amendment except amend as follows: "Special occupancy or special applications where wide temperature ranges are not acceptable (such as production clean rooms, labs, museums, some areas of hospitals.)"	Need to retain the flexibility of tighter control in industrial areas. 5F is unworkable. Also concerned that "process applications" in original version contradicts the application of this standard mentioned in 2.3c.
5	6.4.4.1.2	Duct Insulation	Suggest " Exception e. Supply and Return grilles and diffusers."	Standard Practice
6	6.4.4.1.3	Piping Insulation	Suggest addition to Exception b to read "or piping that has temperatures at least 2F above the space dew point temperature."	Chilled beam designs using 57F supply water temps typically do not employ insulation
7	6.4.4.2.2	Duct Leakage Tests	Recommend deletion	Several key decision points in addition to pressure, ie heating/cooling or ventilation only, total air capacity, duct length. Indication of high air leakage can also be determined by air balancing testing already included.
8	Table 6.4.4.2A	Duct Seal Class	Suggest revision of "return" to " Return and Outside "	Outside air duct should be sealed
9	6.5.1	Economizers	Suggest "Exception j. Specialty industrial /lab/hospital areas where strict zone air pressure controls are employed."	Airside Economizers add an unnecessary degree of risk in strict air pressure control applications.
10	6.5.2.2.2.a	2 Pipe Changeover System	Suggest revision of "15F" to " 4F".	15F too high for some applications involving strict temperature tolerances

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11	6.5.2.3.d	Dehumidification	Suggest that "specialty labs and clean rooms" be added to the list of areas.	Minimize possible debate for the life science/ biotech industries.
12	6.5.3.2.2	Static Pressure Sensor Location	Suggest "Exception a. Systems used for lab manifold exhaust control."	Typically, sensors are placed at fan suction plenum.
13	6.5.6.1.a	Exhaust Air Energy Recovery	Suggest revision to "Exception a. "Laboratory and industrial production/ manufacturing and research systems."	This exception is not tied strictly to labs and fume hoods (section 6.5.7.2).
14	6.5.6.1.c	Exhaust Air Energy Recovery	Suggest a clear definition of "toxic"; Performance based on OSHA 8 hr limits?	Nearly all lab exhaust may be "toxic".
15	6.5.6.1.j	Exhaust Air Energy Recovery	Suggest "Exception j. Where heat recovery coil and makeup air transfer coil are separated by a minimum distance of 75 ft due to existing conditions or health concerns over reintroduction of contaminants."	Exhaust air energy recovery has been shown in past studies to have very poor ROI's when separated by distances indicated.
16	6.5.6.2.2	Heat Recovery for Service Water Heating	Suggest adding " Exception c. Facilities that connect to existing service hot water systems meeting 7.1.1.2 exception."	Adding condenser heat recovery when intending to use existing service water systems is not practical.
17	6.5.7.2	Fume Hoods	Suggest addition of "Exception a. VAV control of all lab rooms is not required if thermal, health and safety criteria mandate constant volume control."	Some lab rooms do not benefit from VAV due to high sensible loads fulltime or the need to maintain constant airflow for health and safety concerns.
18	6.5.7.2.b	Fume Hoods	Suggest removal of "no humidification added" portion	Quite often labs with fume hoods employ solvents that could create dangerous conditions in low humidity conditions due to static electricity
19	Tables 6.8.2A and 6.8.2B	Duct Insulation Tables	Suggest including outside air duct in insulated tables by replacing "supply ducts" with "supply and outside air ducts".	Outside air requires insulation also.
20	9.1.1 Exceptions	Lighting Scope	Suggest addition of "Exception e. Specialty lighting used in research areas that has material effects on test data."	Some labs employ special colored or high intensity lighting in their testing.
21	9.1.1 Exceptions	Lighting Scope	Suggest addition of "Exception f. Specialty lighting required for high security video monitoring"	High security areas require specialty lighting intensity for video detail.

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22	9.4.2	Tandem Wiring	Suggest ' Exception g. Luminaires serving special lab or production areas requiring extraordinary light levels for quality assurance."	Some areas require higher light levels to accommodate a quality function by personnel
23	9.4.5	Exterior Building Lighting Power	Suggest "Exception j. Lighting intended to highlight exterior features due to high security concerns."	High security lighting should not be figured in the standard exterior building lighting power budgets.
24	11.2.3	Purchased Energy Rates	If Chapter 11 is accepted (overturn proposed Indiana Amendment), suggest deletion of "and approved by the adopting authority."	Unnecessarily complex and does not account for some consumers obtaining special rates that the adopting authority may not be aware of.
25	Proposed Indiana Amendments	All	Accept all proposed Indiana Amendments other than those indicated within this review for editing.	